

SEMICONDUCTOR COMPONENT AND METHOD OF MANUFACTURING

Abstract of the Disclosure

5 A semiconductor component includes a semiconductor layer (110) having a trench (326). The trench has first and second sides. A portion (713) of the semiconductor layer has a conductivity type and a charge density. The semiconductor component also includes a control electrode (540, 1240) in the trench. The semiconductor component further includes a channel region (120) in the semiconductor layer and adjacent to the trench. The semiconductor component still further includes a region (755) in the semiconductor layer. The region has a conductivity type different from that of the portion of the semiconductor layer. The region also has a charge density balancing the charge density of the portion of the semiconductor layer.

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